

Performance Evaluation of Commercial Banks in Oman Using Ratio Analyses

Firdouse Rahman Khan¹ and Iman Sulaiman Al Maktoumi²

Faculty of Business, Sohar University, Sultanate of Oman

Email: ¹firdouse4u@yahoo.co.uk, ²lmaktoumi@su.edu.om

Article History: Received on 15th Nov. 2020, Revised on 12th Dec. 2020, Published on 7th Jan. 2021

Abstract

Purpose of the study: The purpose of the study was to critically analyse the effectiveness of banks' performances and to examine the associations amongst the asset management, banks' size, operational efficiency, and their impact on the bank's performance.

Design/Methodology/Approach: The secondary data was obtained from the annual reports of five selected commercial banks of Oman listed in the Muscat Securities Market (MSM) for the period 2013 to 2019. The collected data was analysed through financial ratios using excel and SPSS and was used to evaluate the banks' performance.

Findings: The findings of the study revealed that the Operational Efficiency (OE) of the selected commercial banks had an impact on the Return on Assets (ROA); advances of the selected commercial banks had an impact on the interest income whereas operational efficiency of the selected commercial banks had NO impact on the Interest Income. The study further confirmed that Bank Muscat proved to be the bank that performed well over the years 2013 to 2019.

Research Implications: The study proved that the banks' financial performances can be measured through the assets size, asset management, and equity management using ratio analysis which can be a good measure to adjudge the financial performances of the banks.

Social Implications: The study helps the stakeholders of the banks to understand the factors and the banking activities that might help to enhance the financial performances of the banks and to take necessary action and suitable decisions accordingly.

Originality/value: The study was restricted to five selected commercial banks of Oman and the study had relied mostly on quantitative techniques involving ratio analyses. The study can be extended to all the commercial banks in Oman including the most determining factor viz. customer satisfaction.

Keywords: Financial Performance of Banks, Operational Efficiency, Return on Assets, Return on Equity, Interest Income, Ratio Analyses.

Introduction

Financial services are considered to be the growth accelerators and factors leading to the success of projects in both advanced and developing countries. However, banks take a leading role in offering customers, a full range of superior services. The banking sector is an integral part of any economy. The banking system creates money in any economy. It plays a major role in the wellbeing of the economy and it is the most important source of finance for most of the businesses in any country, especially banking system in Oman deserves such pride.

The profitability and soundness of the commercial banking sector are at a better point to add performance in the financial system of the country ([Athanasoglou et al., 2008](#)). It is generally believed that steady financial performance leads to well managed organizational functions. [Mhadhbi et al. \(2020\)](#) stated that a weak banking sector not only jeopardizes the sustainability of an economy but can also trigger a financial crisis leading to economic crises. Improving financial performance is dependent on three main principles, size of the organization, asset management, and Operation efficiency of the bank ([Anojan & Nimalathan, 2014](#)).

Sixteen commercial banks operating in Oman are licensed by the Central Bank of Oman (CBO) ([Al Maamari, 2020](#)). CBO is the governing body of the financial and economic sectors in Oman, especially the banking sector. Monetary policies framed by the CBO protect price stability in currency, prices and ensuring credit flow into the economy. The banking sector in Oman is the smallest among the Gulf countries and therefore the local banks are operating in an increasingly competitive market. They are required to improve on the three principal factors viz. the institution size, its asset management, and the operational efficiency ([Tarawneh, 2006](#)). Hence the study proposes to calculate the financial indicators such as asset utilization, Bank's size, Operational Efficiency to evaluate the financial performances and link them.

Purpose of the study

The purpose of the study was to critically analyse the effectiveness of banks' performances and to examine the associations amongst the asset management, banks' size, operational efficiency, and their impact on the bank's performance.

Review of Literature

Commercial banks are more operational than the public sector banks as they can easily come out of distress situations ([Nimalathasan, 2009](#)). [Islam \(2003\)](#) claimed that the banking sector was well organized and was able to develop due to the competition prevailing among them. [Jahangir et al. \(2007\)](#) studied traditional measures of profitability among stockholders' equity that was completed different in industrial banking from any other sector. [Hirtle and Stiroh \(2007\)](#) used the measure of retail intensity (retail loan share, retail deposit share, and branches) to compare with equity market and accounting measure of bank's performance confirmed that increased focus on retail banking is linked with lower equity market and accounting returns for all banks. [Aspal and Malhotra \(2012\)](#) analysed the performances of public sector banks using CAMEL, a ratio-based model using liquidity, asset quality, and capital adequacy. [Adam \(2014\)](#) used ratio analysis and measured the financial performance of a bank and showed that the status of the bank concerning total assets, total credits, and total profits was improving. [Kumbirai and Webb \(2010\)](#) used financial ratios and measured the increasing banks' performances using liquidity, credit quality, and profitability performance.

The multi-criteria methodology was used to distinguish and categorize banks based on their profitability and efficiency ([Spathis et al., 2002](#)). Many researchers had used asset management and liability management to distinguish them ([Caddy, 2000](#); [Finch, 2001](#); [Richard & James, 2003](#)). [Ncube \(2009\)](#) suggested that the financial ratio method is preferable between the two accounting approaches – financial ratios and econometric techniques in measuring the banks' performances. [Alam and Jahan \(1999\)](#) claimed that the profitability ratios are more useful in measuring the capacity of earnings as profit earning considered to be the fundamental aim of any commercial bank. [Bhatt and Ghosh \(1995\)](#) found that most banks indicated higher profitability leads to better bank's performance while lower profitability leads to lower bank's performance.

Return on Equity (ROE) can be considered as the most useful among profitability ratios as higher the return on equity means more capable to earn a profit ([Van Horne & Wachowicz, 2005](#)). [Ahmed and Khababa \(1999\)](#) used Return on Assets (ROA) and ROE to measure profitability. [Molyneux and Thornton \(1992\)](#) found that there was a positive relationship between ROE and the interest rate level. [Ali et al. \(2011\)](#) studied the profitability of banks showed that there was a significant relationship between the assets management ratios, capital, and economic growth with ROA. [Shoaib \(2011\)](#) investigated the capital structure to measure the performance of banks claimed that bank's size influenced bank's profitability which was measured by ROE.

[Khan \(2008\)](#) claimed that the banks with huge assets, capital, deposits, and credits did not mean that had better profitability performances, but the three factors that could positively affect a bank's financial performance which are the bank's size, operational efficiency, and asset management. [Edris \(1997\)](#) determined the most important key factors – bank assets, employees' efficiency, friendliness, and the number of international branches. [Bikker \(1999\)](#) suggested that there is a positive relationship between the size and the banks' efficiency. [Eichengreen and Gibson \(2001\)](#) confirmed that the size of the banks had a positive effect on profitability. [O'Donnell and Van Der Westhuizen \(2002\)](#) found that many small scale branches could increase their economies of scale and the overall efficiencies. [Halkos and Salamouris \(2004\)](#) claimed that the higher the size of total assets higher the efficiency. [Ndu and Wetmore \(2005\)](#) concluded that the small banks with averages assets size were performing almost the same as the medium and large size banks.

[Almazari \(2011\)](#) proved that there exists a negative correlation between ROA and the size of the banks, a positive correlation between ROA and asset management ratios, and a negative correlation between ROA and operational efficiency. [Tarawneh \(2006\)](#) determined the performance of Omani commercial banks through financial comparisons using financial ratios such as ROA, ROE, return on deposits, and the effect of assets management, bank size, and operational efficiencies. [Samad \(2004\)](#) studied the credit quality, liquidity performances, and profitability showed that the banks had low profitability, low liquid, and higher credit risk than the industrial banks. [Gul et al. \(2011\)](#) investigated the impact of assets, loans, equity, deposits, economic growth, inflation, and market capitalization on major profitability indicators – ROA, ROE, ROCE, and net interest margin (NIM), found that both internal and external factors have a strong influence on the profitability.

[Ally \(2013\)](#) used financial ratios to measure the profitability and liquidity of banks found that the overall bank financial performance increased considerably and there is no significant difference in terms of ROA and significant differences in terms of ROE. [Baxi \(2020\)](#) revealed that capital structure variables like Long term debt to capital and total debt to capital have a statistically significant negative impact whereas asset growth and firm size have a statistically significant positive impact on the profitability of core business operations of commercial banks. [Chaudhary and Sharma \(2011\)](#) claimed that the performances of private banks are so sound than the public sector banks (PSBs) due to fewer government regulatory measures. The performance of PSBs seemed to be dipped at the efficiency level on the contrary to that of private sector banks ([Mishra et al., 2013](#)).

Research Methodology

The secondary data was collected from the population of sixteen commercial banks prevailing in Oman. The data was obtained from the annual reports of five selected commercial banks of Oman listed in the Muscat Securities Market (MSM) for the period 2013 to 2019. The five selected commercial banks were Ahli Bank (AB), Bank Dhofar (BD), Bank Muscat (BM), Bank Sohar International (BS), and Hong Kong and Shanghai Banking Corporation (HSBC). The collected data was analysed through financial ratios using excel and SPSS and was used to evaluate the bank's performance.

Table 1 contains the definitions and the details of the selected variables.

Findings

Table 1. Operational Definition of Variables

Variables	Symbols used	Definition	References
Return on assets	ROA	Net Profit/Total Assets	(Al-Saidi & Al-Shammari, 2014)
Return on equity	ROE	Net Profit/Shareholders Equity	(Hovakimian et al., 2001 ; Tomar & Bino, 2012)
Return on Deposits	ROD	Net Income/Average Deposits	(Wahyudi et al., 2018)
Operational Efficiency	OE	Operating Expense/Net Income	(Allen & Rai, 1996 ; Ikhide, 2008)
Bank size	A	Total assets of the Banks	(Naushad & Malik, 2015)
Credits	C	Total Advances of the Banks	(Minh et al., 2013 ; Teket et al., 2011)
Deposits	D	Total Deposits of the Banks	(Teket et al., 2011)
Equity	E	Total Equity of the Banks	(Poh et al., 2018)
Interest Income	IntInc	Net Interest Income	(Akala, 2018 ; Cetin & Cetin, 2010 ; Doğan, 2013)

Total Deposits (D)

Table 2. Total Deposits of the Omani Commercial Banks

(Figures in 000s)

Year Bank	2013	2014	2015	2016	2017	2018	2019	Growth rate	Average
AB	955055	1076190	1300837	1271026	1450851	1661645	1711726	756671	1346761
BD	2031746	2482179	2592371	2885189	3068409	2571119	2537967	506221	2595569
BM	5552913	6299350	6738315	6694808	6459410	7504219	7011266	1458353	6608612
BS	1392386	1551696	1464479	1531689	1642845	1818353	2097310	704924	1642680
HSBC	1792703	1852339	1802338	1866655	1932050	1926125	2071457	278754	1891952

Comparing the average of the 5-years deposits, it can be observed from Table.2, that Bank Muscat ranked first, trailed by Bank Dhofar and HSBC. Comparing the growth rate, it was observed that Bank Muscat ranked first, trailed by Ahli Bank and Bank Dhofar. However, in the latest year of discussion i.e., 2019, Bank Muscat was leading in total deposits followed by Bank Dhofar and Bank Sohar International.

Total Credits (C)

Table 3. Total Credits of the Omani Commercial Banks

(Figures in 000s)

Year Bank	2013	2014	2015	2016	2017	2018	2019	Average	Growth rate
AB	1104917	1388871	1518052	1522106	1634458	1870677	2054986	1584867	950069
BD	2023280	2345869	2867342	3328652	3548769	2761760	2617345	2784717	594065
BM	5863533	6385625	6695486	7102323	7358603	7828485	7712193	6992321	1848660
BS	1248039	1423053	1647311	1913075	2098748	2251930	2454153	1862330	1206114
HSBC	980472	1161313	1200808	1418415	1394887	1389559	1502734	1292598	522262

Comparing the average of the 5-years credits, it can be observed from Table.3, that Bank Muscat ranked first, trailed by Bank Dhofar and Bank Sohar International. Comparing the growth rate, we observe that Bank Muscat ranked first, trailed by Bank Sohar International and Ahli Bank. However, in the latest year of discussion i.e., 2019, Bank Muscat was leading in total credits followed by Bank Dhofar and Bank Sohar International.

Total Assets (A)

Table 4. Total assets of the Omani Commercial Banks

(Figures in 000s)

Year Bank	2013	2014	2015	2016	2017	2018	2019	Average	Growth rate
AB	1339485	1644811	1898265	1899654	2014582	2290414	2518527	1943677	1179042
BD	2605379	3194127	3593061	3952043	4246710	4213490	4325845	3732951	1720466
BM	8486450	9728318	12544529	10820070	11149222	12288039	12290608	11043891	3804158
BS	1885620	2075395	2207625	2520101	2842818	3046403	3505105	2583295	1619485
HSBC	2220888	2242912	2199942	2253893	2333797	2360618	2549997	2308864	329109

Comparing the average of the 5-years Assets, it can be observed from Table.4, that Bank Muscat ranked first, followed by Bank Dhofar and Bank Sohar International. Comparing the growth rate, we observe that Bank Muscat ranked first, followed by Bank Dhofar and Bank Sohar International. However, in the latest year of discussion i.e., 2019, Bank Muscat was leading in total assets followed by Bank Dhofar and Bank Sohar International.

Total shareholders' Equity (E)

Table 5. Total Shareholders' Equity of the Omani Commercial Banks

(Figures in 000s)

Year Bank	2013	2014	2015	2016	2017	2018	2019	Average	Growth rate
AB	184895	199530	227283	242948	304827	359004	389195	272526	204300
BD	303607	325318	476529	534000	587007	698162	686155	515825.4	382548
BM	1212294	1312067	1396959	1546740	1818333	1927742	2002636	1602396	790342
BS	171269	192076	253162	273886	293596	385424	536109	300788.9	364840
HSBC	305847	309877	308516	313710	323256	340441	351992	321948.4	46145

Return on Equity Ratio (ROE)

Table 6. Total ROE of the Omani Commercial Banks

Year Bank	2013	2014	2015	2016	2017	2018	2019	Average	Growth rate
AB	12.46%	12.59%	12.20%	12.16%	8.75%	8.02%	7.97%	10.59%	-4.49%
BD	19.24%	12.43%	9.81%	8.92%	8.11%	7.20%	4.41%	10.02%	-14.83%
BM	12.55%	12.44%	12.56%	11.41%	9.72%	9.32%	9.27%	11.04%	-3.29%
BS	15.69%	15.56%	10.96%	6.98%	8.63%	7.62%	6.42%	10.26%	-9.27%
HSBC	3.55%	3.95%	4.19%	5.39%	5.91%	9.21%	8.32%	5.79%	4.77%

From Table.6, in comparison to the total average ROE, HSBC ranked first followed by Bank Muscat and Ahli Bank. Comparing the growth rate, it was observed that Bank Muscat ranked first, followed by Ahli Bank and Bank Sohar International. However, in the current year i.e., 2019, Bank Muscat is leading in ROE (9.27%) followed by HSBC (8.32%) and Ahli Bank (7.97%).

Return on Deposits Ratio (ROD)

Table 7. Total ROD of the Omani Commercial Banks

Year Bank	2013	2014	2015	2016	2017	2018	2019	Average	Growth rate
AB	2.72%	2.47%	2.33%	2.30%	1.96%	1.85%	1.84%	2.21%	-0.88%
BD	3.19%	1.79%	1.84%	1.74%	1.60%	1.78%	1.18%	1.88%	-2.00%
BM	2.80%	2.75%	2.69%	2.63%	2.69%	2.57%	2.56%	2.67%	-0.24%
BS	1.97%	2.03%	1.84%	1.28%	1.60%	1.70%	1.76%	1.74%	-0.21%
HSBC	0.60%	0.67%	0.71%	0.92%	1.01%	0.00%	0.00%	0.56%	-0.60%

From Table.7, in comparison to the total average ROD Bank Muscat ranked first followed by Ahli Bank and Bank Dhofar. Comparing the growth rate, we observe that Bank Sohar ranked first, followed by Bank Muscat and HSBC. However, in the current year i.e., 2019, Bank Muscat is leading in ROD (2.56%) followed by Ahli Bank (1.84%) and Bank Sohar International (1.76%).

Return on Assets Ratio (ROA)

Table 8. Total ROA of the Omani Commercial Banks

Year Bank	2013	2014	2015	2016	2017	2018	2019	Average	Growth rate
AB	1.89%	1.68%	1.57%	1.56%	1.36%	1.34%	1.29%	1.53%	-0.60%
BD	2.46%	1.40%	1.38%	1.26%	1.16%	1.19%	0.71%	1.36%	-1.75%
BM	1.86%	1.79%	1.58%	1.51%	1.61%	1.53%	1.51%	1.63%	-0.35%
BS	1.46%	1.51%	1.30%	0.81%	0.94%	1.00%	1.05%	1.15%	-0.41%
HSBC	0.47%	0.55%	0.58%	0.76%	0.83%	1.34%	1.19%	0.82%	0.72%

From Table.8, in comparison to the total average (ROA), it can be observed that Bank Muscat ranks first followed by Ahli Bank and Bank Dhofar. Comparing the growth rate, we observe that HSBC ranked first, followed by Bank Muscat and Bank Sohar International. However, in the current year i.e., 2019, Ahli Bank is leading in ROA (1.29%) followed by Bank Muscat (1.51%) and HSBC (1.19%).

Ranking of the banks on a Point score basis

Table 9. Total Performance of all the selected five Omani commercial banks

Banks	Deposits (D)			Credits (C)			Assets (A)			Equity (E)			ROE			ROD			ROA			Total
	T A	G R	C	T A	G R	C	T A	G R	C	T A	G R	C	T A	G R	C	T A	G R	C	T A	G R	C	
AB	4	2	1	2	3	2	4	2	1	1	2	2	4	3	3	4	2	4	4	2	5	57
BD	2	3	4	4	2	4	2	4	4	4	4	4	2	1	1	3	1	2	3	1	1	56
BM	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	4	5	5	4	4	101
BS	3	4	3	3	4	3	3	3	3	2	3	3	3	2	2	2	5	3	2	3	2	61
HSBC	1	1	2	1	1	1	1	1	2	3	1	1	1	5	4	1	3	1	1	5	3	40

TA – Total Average, GR – Growth Rate, C – Current year Figures

Using the ranking from the previous Tables 1 to 7 all the rankings are put together and presented in the above Table 9. The bank which ranks first was given 5 points, the second was given 4 points, the third was given 3 points, the fourth was given 2 points and the fifth was given 1 point. Thus, the total points showed by each bank was given at the right end column of the table. Accordingly, Bank Muscat topped the list with 101 points, followed by Bank Sohar International with 61 points and Ahli Bank with 57 points.

Return on Assets Ratio (ROA)

Table 10. Crucial Data of all the selected five Omani Commercial Banks

Variables\ Bank	AB	BS	BM	BS	HSBC
ROA	1.53%	1.36%	1.63%	1.15%	0.82%
Interest Income	73332.86	138989.6	325528.429	99650.29	63167.86
Operational Efficiency	74.28%	130.11%	108.17%	129.12%	312.37%
Asset Utilization	2.84%	2.55%	3.12%	2.46%	2.68%
Asset Size	1943677	3732951	11043890.9	2583295	2308864
ROE	10.59%	10.02%	11.04%	10.26%	5.79%

Table.10 was obtained using the average figures of the variables obtained from tables.1 to 7 for all the selected five commercial banks. A linear regression analysis was carried to find out the impact of the operational efficiency and the advances as claimed.

Table 11. (a), (b), (c) & (d) Regression

Variables Entered / Removed

Model	Variables Entered	Variables Removed	Method
1	Operational Efficiency ^b	...	Enter

^a Dependent Variable: ROA

^b All requested Variables entered

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.947 ^a	.896	.862	.15857

^a Predictors: (constant), Operational Efficiency

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.652	1	0.652	25.913	.015 ^b
Residual	0.075	3	0.025		
Total	0.727	4			

^a Dependent Variable: ROA

^b Predictors: (constant), Operational Efficiency

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(constant)	1.839	.123		15.001	.001
Operational Efficiency	-.003	.001	-.947	-5.091	.015

^a Dependent Variable: ROA

From Table.11, it can be seen that the p-value of the F-table is less than .05 and it could also be seen that the p-value for the dependent variable is less than 0.05. Therefore, ROA is dependent on Operational Efficiency i.e., the Operational Efficiency of the selected commercial banks had an impact on the ROA. Thus the linear equation obtained is as follows:

$$ROA = 1.839 - .003 OE$$

where ROA – Return on Assets and OE – Operational Efficiency.

Table 12. (a), (b), (c) & (d) Regression Analysis

Variables Entered / Removed

Model	Variables Entered ^b	Variables Removed	Method
1	Advances	...	Enter

^a Dependent Variable: Interest Income

^b All requested Variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.986 ^a	.971	.962	26653.543

^a Predictors: (constant), Advances

ANOVA^a

Model	Sum Of Squares	df	Mean Square	F	Sig.
Regression	7.190E+10	1	7.190E+10	101.210	.002 ^b
Residual	2131234033	3	710411344.2		
Total	7.403E+10	4			

^a Dependent Variable: Interest Income

^b Predictors: (constant), Advances

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(constant)	-50596.296	20129.330		-2.514	.087
Advances	.059	.006	.986	10.060	.002

^a Dependent Variable: Interest Income

From Table.12, it can be seen that the p-value of the F-table is less than .05 and it could also be seen that the p-value for the dependent variable is less than 0.05. Therefore, Interest Income is dependent on Credit Advances i.e., Credits of the selected commercial banks had an impact on the Interest Income.

Thus the linear equation obtained is as follows:

$$\text{IntInc} = -50596.296 + .059 C \quad \text{where } C = \text{Credits and IntInc} = \text{Interest Income.}$$

Table 13. (a), (b), (c) & (d) Regression Variables Entered / Removed

Model	Variables Entered	Variables Removed	Method
1	Operational Efficiency ^b	...	Enter

^a Dependent Variable: Interest Income

^b All requested Variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.357 ^a	.128	-.163	1.004220264

^a Predictors: (constant), Operational Efficiency

ANOVA^a

Model	Sum Of Squares	df	Mean Square	F	Sig.
Regression	0.442	1	0.442	0.439	.555 ^b
Residual	3.025	3	1.008		
Total	3.468	4			

^a Dependent Variable: Interest Income

^b Predictors: (constant), Operational Efficiency

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(constant)	1.941	.793		2.448	.092
Operational Efficiency	-3.087E-6	.000	-.357	-.662	.555

^a Dependent Variable: Interest Income

From Table.13, it can be seen from the F-table that the p-value > .05. Therefore, Interest income is independent of Operational Efficiency i.e., the Operational Efficiency of the selected commercial banks had NO impact on the Interest Income.

Conclusion

After going through the above analyses the following were observed:

Comparing the overall average of the selected commercial banks, it was observed that Bank Muscat ranked first, followed by Bank Sohar International and Ahli Bank. Comparing the current year's overall outstanding of the selected commercial banks, it was observed that Bank Muscat ranked first, followed by Bank Dhofar and Bank Sohar International. Comparing the overall growth rate of the selected commercial banks, it was observed that Bank Muscat ranked first, followed by Bank Sohar International and HSBC.

It was also observed that ROA is dependent on Operational Efficiency. It was also noticed that Interest Income is dependent on Advances i.e., the Advances of the selected commercial banks had an impact on the Interest Income. Among the total average (ROE) Ahli Bank ranked first; followed by Bank Sohar and Bank Dhofar ranked third. It was also confirmed that the Operational Efficiency of the selected commercial banks had an impact on the ROA; advances of the selected commercial banks had an impact on the interest income whereas the Operational Efficiency of the selected commercial banks had NO impact on the Interest Income. Thus, Bank Muscat proved to be the best-performed bank over the years 2013 to 2019.

From the overall analysis, it was confirmed that the Bank Muscat topped the tally among the selected five commercial banks of Oman in terms of deposits, credits, assets, and shareholders' equity. The ranking was as follows:

1. Bank Muscat hit the top of the list

2. Bank Sohar International was second on the list and
3. Ahli Bank was the third.

The study helps the stakeholders of the banks to understand the factors and the banking activities that might help to enhance the financial performances of the banks and to take necessary action and suitable decisions accordingly. This will help the persons directly involved in operational activities such as managers, financial controllers to initiate prompt action for the improvement of the financial performances of the banks.

References

1. Adam, M. H. M. (2014). Evaluating the financial performance of banks using financial ratios A case study of Erbil bank for investment and finance. *European Journal of Accounting Auditing and Finance Research*, 2(6), 162-177. <http://www.eajournals.org/wp-content/uploads/Evaluating-the-Financial-Performance-of-Banks-Using-Financial-Ratios-A-Case-Study-of-Erbil-Bank-for-Investment-and-Finance1.pdf>
2. Ahmed, A. M., & Khababa, N. (1999). Performance of the banking sector in Saudi Arabia. *Journal of Financial Management & Analysis*, 12(2), 30. <https://www.econbiz.de/Record/performance-of-the-banking-sector-in-saudi-arabia-ahmed-abdulkader-mohamed/10001487452>
3. Akala, İ. (2018). Comparing Financial Performances of Conventional and Participation Banks: Case of Turkey (2005–2015). *International Journal of Inspiration & Resilience Economy*, 2(1), 11-17. <https://doi.org/https://doi.org/10.5923/j.ijire.20180201.02>
4. Al-Saidi, M., & Al-Shammari, B. (2014). Corporate governance in Kuwait: An analysis in terms of grounded theory. *International Journal of Disclosure and Governance*, 11(2), 128-160. <https://doi.org/https://doi.org/10.1057/jdg.2012.19>
5. Al Maamari, A. (2020). Measuring Competition in Banking Sector in Oman. *International Journal of Research in Entrepreneurship & Business Studies*, 1(2), 33-43. <https://doi.org/https://doi.org/10.47259/ijrebs.124>
6. Alam, N., & Jahan, S. B. (1999). Default culture in banking sector of Bangladesh. *Bank Parikrama*, 24(1), 23-38.
7. Ali, K., Akhtar, M. F., & Ahmed, H. Z. (2011). Bank-specific and macroeconomic indicators of profitability-empirical evidence from the commercial banks of Pakistan. *International Journal of Business and Social Science*, 2(6), 235-242. http://joc.hcc.edu.pk/faculty_publications/24.pdf
8. Allen, L., & Rai, A. (1996). Operational efficiency in banking: An international comparison. *Journal of banking & Finance*, 20(4), 655-672. [https://doi.org/https://doi.org/10.1016/0378-4266\(95\)00026-7](https://doi.org/https://doi.org/10.1016/0378-4266(95)00026-7)
9. Ally, Z. (2013). Comparative analysis of financial performance of commercial banks in Tanzania. *Research Journal of Finance and Accounting*, 4(19), 133-143. <https://www.iiste.org/Journals/index.php/RJFA/article/view/9509/9831>
10. Almazari, A. A. (2011). Financial performance evaluation of some selected Jordanian commercial banks. *International Research Journal of Finance and Economics*, 68(8), 50-63. https://www.researchgate.net/publication/289171253_Financial_performance_evaluation_of_some_selected_Jordanian_commercial_banks
11. Anojan, V., & Nimalathan, B. (2014, Mar. 15, 2014). *A Comparative Study of Financial Performance of State and Private Sector Commercial Banks in Sri Lanka: An Application of CAMEL Rating System* International Conference on Contemporary Management (ICCM - 2014), University of Jaffna, Srilanka.
12. Aspal, P., & Malhotra, N. (2012). Performance appraisal of Indian public sector banks. *World Journal of Social Sciences*, 3(3), 71-88. <http://www.wjsspapers.com/static/documents/May/2013/7.%20Parvesh.pdf>
13. Athanasoglou, P. P., Brissimis, S. N., & Delis, M. D. (2008). Bank-specific, industry-specific and macroeconomic determinants of bank profitability. *Journal of international financial Markets, Institutions and Money*, 18(2), 121-136. <https://doi.org/https://doi.org/10.1016/j.intfin.2006.07.001>

14. Baxi, B. (2020). *A study of impact of capital structure on the profitability of public and private Sector banks in India* [Thesis, Indus University]. Ahmedabad.
15. Bhatt, P., & Ghosh, R. (1995). Profitability of Commercial banks in India. *Indian Journal of Economics*, 76, 203-214.
16. Bikker, J. A. (1999). Efficiency in the European Banking Industry: an Exploratory Analysis to Rank Countries. *Brussels Economic Review*, 17, 1-24.
17. Caddy, I. (2000). Intellectual capital: recognizing both assets and liabilities. *Journal of Intellectual Capital*, 1(2), 129-146.
<https://doi.org/http://doi.org/10.1108/14691930010377469>
18. Cetin, M. K., & Cetin, E. İ. (2010). MULTI-CRITERIA ANALYSIS OF BANKS' PERFORMANCES. *International Journal of Economics and Finance Studies*, 2(2), 73-78.
19. Chaudhary, K., & Sharma, M. (2011). Performance of Indian public sector banks and private sector banks: A comparative study. *International journal of innovation, management and technology*, 2(3), 249.
20. Doğan, M. (2013). Comparison of financial performances of domestic and foreign banks: The case of Turkey. *International Journal of Business and Social Science*, 4(1), 233-240.
21. Edris, T. A. (1997). Services considered important to business customers and determinants of bank selection in Kuwait: a segmentation analysis. *International Journal of bank marketing*, 15(4), 126-133. <https://doi.org/https://doi.org/10.1108/02652329710189393>
22. Eichengreen, B., & Gibson, H. D. (2001). *Greek banking at the dawn of the new millennium* [C.E.P.R. Discussion Papers 2791]. IDEAS. <https://ideas.repec.org/p/cpr/ceprdp/2791.html>
23. Finch, R. (2001). Asset and liability management for banks: a lawyer's perspective. *Balance Sheet*, 9(3), 20-23. <https://doi.org/http://doi.org/10.1108/09657960110696005>
24. Gul, S., Irshad, F., & Zaman, K. (2011). Factors Affecting Bank Profitability in Pakistan. *Romanian Economic Journal*, 14(39), 61-86.
25. Halkos, G. E., & Salamouris, D. S. (2004). Efficiency measurement of the Greek commercial banks with the use of financial ratios: a data envelopment analysis approach. *Management accounting research*, 15(2), 201-224.
<https://doi.org/https://doi.org/10.1016/j.mar.2004.02.001>
26. Hirtle, B. J., & Stiroh, K. J. (2007). The Return to Retail and the Performance of US Banks. *Journal of banking & Finance*, 31(4), 1101-1133.
<https://doi.org/https://doi.org/10.1016/j.jbankfin.2006.10.004>
27. Hovakimian, A., Opler, T., & Titman, S. (2001). The debt-equity choice. *Journal of Financial and Quantitative analysis*, 1-24. <https://doi.org/https://doi.org/10.2307/2676195>
28. Ikhide, S. I. (2008). Measuring the operational efficiency of commercial banks in Namibia. *South African Journal of Economics*, 76(4), 586-595. <https://doi.org/https://doi.org/10.1111/j.1813-6982.2008.00214.x>
29. Islam, M. M. (2003). Development and performance of domestic and foreign banks in GCC countries. *Managerial Finance*, 29(2/3), 42-72.
<https://doi.org/http://doi.org/10.1108/03074350310768689>
30. Jahangir, N., Shill, S., & Haque, M. A. J. (2007). Examination of profitability in the context of Bangladesh banking industry. *Assumption Business Administration College (ABAC) Journal*, 27(2), 36-46.
31. Khan, A. R. (2008). Bank Management: A Fund Emphasis. *Ruby Publications: Dhaka*, XV(First Edition), 333.
32. Kumbirai, M., & Webb, R. (2010). A financial ratio analysis of commercial bank performance in South Africa. *African Review of Economics and Finance*, 2(1), 30-53.
33. Mhadhbi, K., Terzi, C., & Bouchrika, A. (2020). Banking sector development and economic growth in developing countries: a bootstrap panel Granger causality analysis. *Empirical Economics*, 58, 2817-2836. <https://doi.org/https://doi.org/10.1007/s00181-019-01670-z>
34. Minh, N. K., Long, G. T., & Hung, N. V. (2013). Efficiency and super-efficiency of commercial banks in Vietnam: Performances and determinants. *Asia-Pacific Journal of*

Operational Research, 30(01), 1250047.

<https://doi.org/https://doi.org/10.1142/S0217595912500479>

35. Mishra, A. K., Gadhia, J. N., Kar, B. P., Patra, B., & Anand, S. (2013). Are private sector banks more sound and efficient than public sector banks? Assessments based on Camel and Data Envelopment analysis approaches. *Research Journal of Recent Sciences* 2(4), 28-35.
<http://www.isca.in/rjrs/archive/v2/i4/4.ISCA-RJRS-2012-452.pdf>
36. Molyneux, P., & Thornton, J. (1992). Determinants of European bank profitability: A note. *Journal of banking & Finance*, 16(6), 1173-1178. [https://doi.org/http://doi.org/10.1016/0378-4266\(92\)90065-8](https://doi.org/http://doi.org/10.1016/0378-4266(92)90065-8)
37. Naushad, M., & Malik, S. A. (2015). Corporate governance and bank performance: a study of selected banks in GCC region. *Asian Social Science*, 11(9), 226.
38. Ncube, M. (2009, Nov. 2009). Efficiency of the Banking Sector in South Africa. African Economic Conference 2009 Fostering Development in an Era of Financial and Economic Crises, Addis Ababa.
39. Ndu, C. C., & Wetmore, J. L. (2005). Is The Survival of Small Commercial Banks Threatened? A Comparative Performance Evaluation of US Commercial Banks: 1997-2002. *Journal of International Finance and Economics*, 2, 98-117.
https://www.researchgate.net/publication/254256832_is_the_survival_of_small_commercial_banks_threatened_A_Comparative_performance_evaluation_of_us_Commercial_banks_1997-2002
40. Nimalathasan, B. (2009). Profitability of Listed Pharmaceutical Companies in Bangladesh: An Inter & Intra Comparison of Ambee & IBN Sina Companies. *Universitatii Bucuresti. Analele. Seria Stiinte Economice si Administrative*, 3, 139.
41. O'Donnell, C., & Van Der Westhuizen, G. (2002). Regional comparisons of banking performance in South Africa. *South African Journal of Economics*, 70(3), 485-518.
<https://doi.org/https://doi.org/10.1111/j.1813-6982.2002.tb01301.x>
42. Poh, L. T., Kilicman, A., & Ibrahim, S. N. I. (2018). On intellectual capital and financial performances of banks in Malaysia. *Cogent Economics & Finance*, 6(1), 1453574.
<https://doi.org/https://doi.org/10.1080/23322039.2018.1453574>
43. Richard, B., & James, M. (2003). Asset and liability management: What does the future have in store. *Journal of Intellectual Capital*, 9(3), 135-149.
44. Samad, A. (2004). Bahrain commercial bank's performance during 1994-2001. *Credit and Financial Management Review*, 10(1), 33-40.
45. Shoaib, A. (2011). Measuring performance through capital structure: Evidence from banking sector of Pakistan. *African Journal of Business Management*, 5(5), 1871-1879.
46. Spathis, C., Kosmidou, K., & Doumpos, M. (2002). Assessing profitability factors in the Greek banking system: A multicriteria methodology. *International Transactions in operational research*, 9(5), 517-530. <https://doi.org/http://doi.org/10.1111/1475-3995.00371>
47. Tarawneh, M. (2006). A comparison of financial performance in the banking sector: Some evidence from Omani commercial banks. *International Research Journal of Finance and Economics*, 3(3), 101-112.
48. Teker, S., Teker, D., & Kent, O. (2011). Measuring Commercial Banks' Performances in Turkey: A Proposed Model. *Journal of Applied Finance and Banking*, 1(3), 97.
49. Tomar, S., & Bino, A. (2012). Corporate governance and bank performance: evidence from Jordanian banking industry. *Jordan Journal of Business Administration*, 8(2), 353-372.
50. Van Horne, J. C., & Wachowicz, J. M. (2005). *Fundamentals of financial management*. Pearson Education.
51. Wahyudi, S., Nofendi, D., Robiyanto, R., & Hersugondo, H. (2018). Factors affecting return on deposit (ROD) of sharia banks in Indonesia. *Business: Theory and Practice*, 19, 166-176.